

**THIRD PERIODIC REVIEW (DRAFT FINAL)**  
**GENERAL ELECTRIC SPOKANE SITE**  
CSID 1082  
FSID 630

---

Prepared by  
Washington State Department of Ecology  
Eastern Regional Office  
Toxics Cleanup Program  
Spokane, WA

March 2013

**[BLANK PAGE]**

## TABLE OF CONTENTS

	Page
1.0 INTRODUCTION .....	1
2.0 SUMMARY OF SITE CONDITIONS .....	3
2.1 SITE DESCRIPTION .....	3
2.2 CLEANUP ACTION PLAN .....	7
2.2.1 Remedial Action Objectives .....	7
2.2.2 Cleanup Levels and Points of Compliance .....	7
2.2.3 Selected Cleanup Action .....	8
2.3 SUMMARY OF CLEANUP ACTIONS .....	9
2.4 LONG-TERM GROUNDWATER MONITORING .....	10
2.5 INSPECTION AND MAINTENANCE OF ASPHALT CAP AND FENCE ...	10
3.0 PERIODIC REVIEW .....	11
3.1 FIRST PERIODIC REVIEW .....	11
3.2 SECOND PERIODIC REVIEW .....	12
3.3 THIRD PERIODIC REVIEW .....	12
3.3.1 Groundwater Monitoring Data Review .....	13
3.3.2 Five Year Review Criteria .....	18
3.3.2.1 Effectiveness of completed cleanup actions .....	18
3.3.2.2 New scientific information for individual hazardous substances for mixtures present at the site .....	19
3.3.2.3 New applicable state and federal laws for hazardous substances present at the Site .....	19
3.3.2.4 Current and projected site use .....	19
3.3.2.5 Availability and practicability of higher preference technologies .....	19
3.3.2.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels .....	19
4.0 CONCLUSIONS .....	20
5.0 RECOMMENDATIONS .....	21
6.0 REFERENCES .....	22
APPENDIX A .....	25
APPENDIX B .....	53

**[BLANK PAGE]**

---

## 1.0 INTRODUCTION

This document is the State of Washington Department of Ecology's (Ecology) third periodic review of post-cleanup conditions and monitoring data to assure the continued protection of human health and the environment at the General Electric Spokane Site (Site). This Site was listed on the National Priority List (NPL) by the United States Environmental Protection Agency (USEPA) in 1988. Ecology was then established as the lead agency for oversight of the cleanup under an agreement with USEPA. Thus, cleanup activities were conducted pursuant to Chapter 70.105D RCW, the Model Toxics Control Act (MTCA), and Chapter 173-340 WAC, MTCA Cleanup Regulation.

Cleanup actions at this Site were completed under a Consent Decree filed in Spokane County Superior Court on January 5, 1994 and amended on March 5, 1997. General Electric Company (GE) implemented the remedial actions in accordance with the design documents required by the Site's Cleanup Action Plan (CAP) dated March 29, 1993, and amended February 3, 1997. Groundwater compliance monitoring is still ongoing at the Site.

Remedial actions implemented at the Site resulted in residual concentrations of Polychlorinated Biphenyls (PCBs) exceeding MTCA Method A cleanup levels for ground water established under WAC 173-340-720(2) [1991, 1993] and for soil established under WAC 173-340-740(2) [1991, 1993]. As a result, institutional controls are in place to assure both the continued protection of human health and the environment, and the integrity of the cleanup action.

WAC 173-340-420 (2) requires Ecology to conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever Ecology conducts a cleanup action
- (b) Whenever Ecology approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever Ecology issues a no further action opinion;
- (d) and one of the following conditions exists:
  - 1. Institutional controls or financial assurance are required as part of the cleanup
  - 2. Where the cleanup level is based on a practical quantitation limit
  - 3. Where, in Ecology's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

Ecology shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

---

Ecology conducted the first periodic review for this Site in 2003 which covered the period from the 2<sup>nd</sup> Quarter 1997 up to and including the 2<sup>nd</sup> Quarter 2002 groundwater monitoring events. Based on this review, Ecology determined further periodic reviews were necessary. The second review covered the groundwater monitoring period from the 3<sup>rd</sup> Quarter 2002 through 2<sup>nd</sup> Quarter 2007. The recommendation in the second review was to continue groundwater monitoring and to continue inspecting and repairing the cap, as necessary.

This third periodic review is for the period of groundwater monitoring events of December 2007 through October 2012.

## 2.0 SUMMARY OF SITE CONDITIONS

### 2.1 SITE DESCRIPTION

The GE Spokane property is located at 4323 East Mission Avenue in Spokane, WA and is approximately 1,200 feet south of the Spokane River (Figure1).

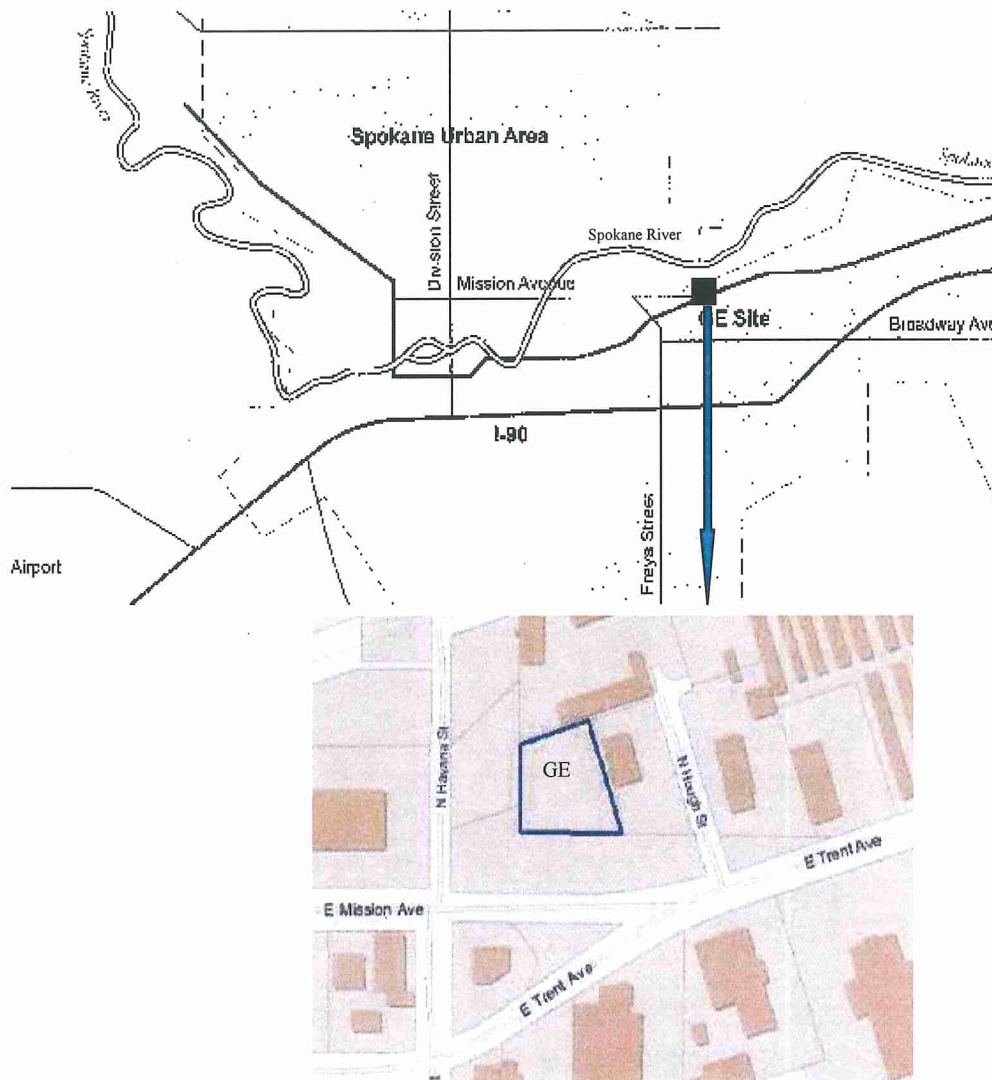


FIGURE 1. SITE LOCATION

The Site includes (see Figure 2): (1) the GE property which is less than 2 acres in size; (2) the adjacent vacant properties owned by Avista (formerly Washington Water Power) to the west; (3) the private property formerly owned by Mr. Marvin Riley (now owned by 125 East Mission LLC) to the north; (4) the City of Spokane Havana Street right-of-way to the west of the vacant Avista lot; and (5) the Lawton Converter property to the west of the right-of-way. These properties are located in an area that is zoned Light Industrial.

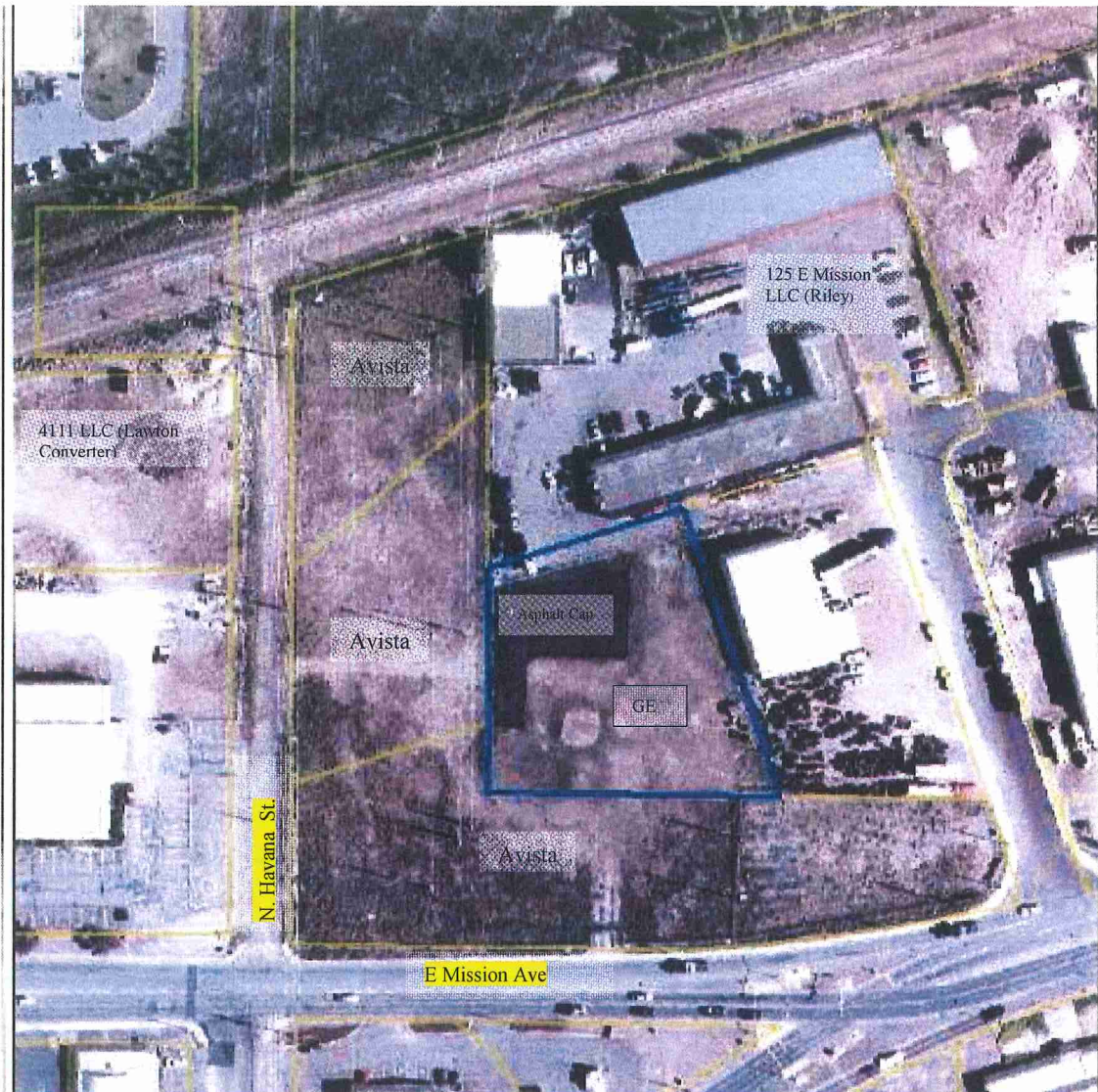


FIGURE 2. GE SPOKANE AND ADJACENT PARCELS

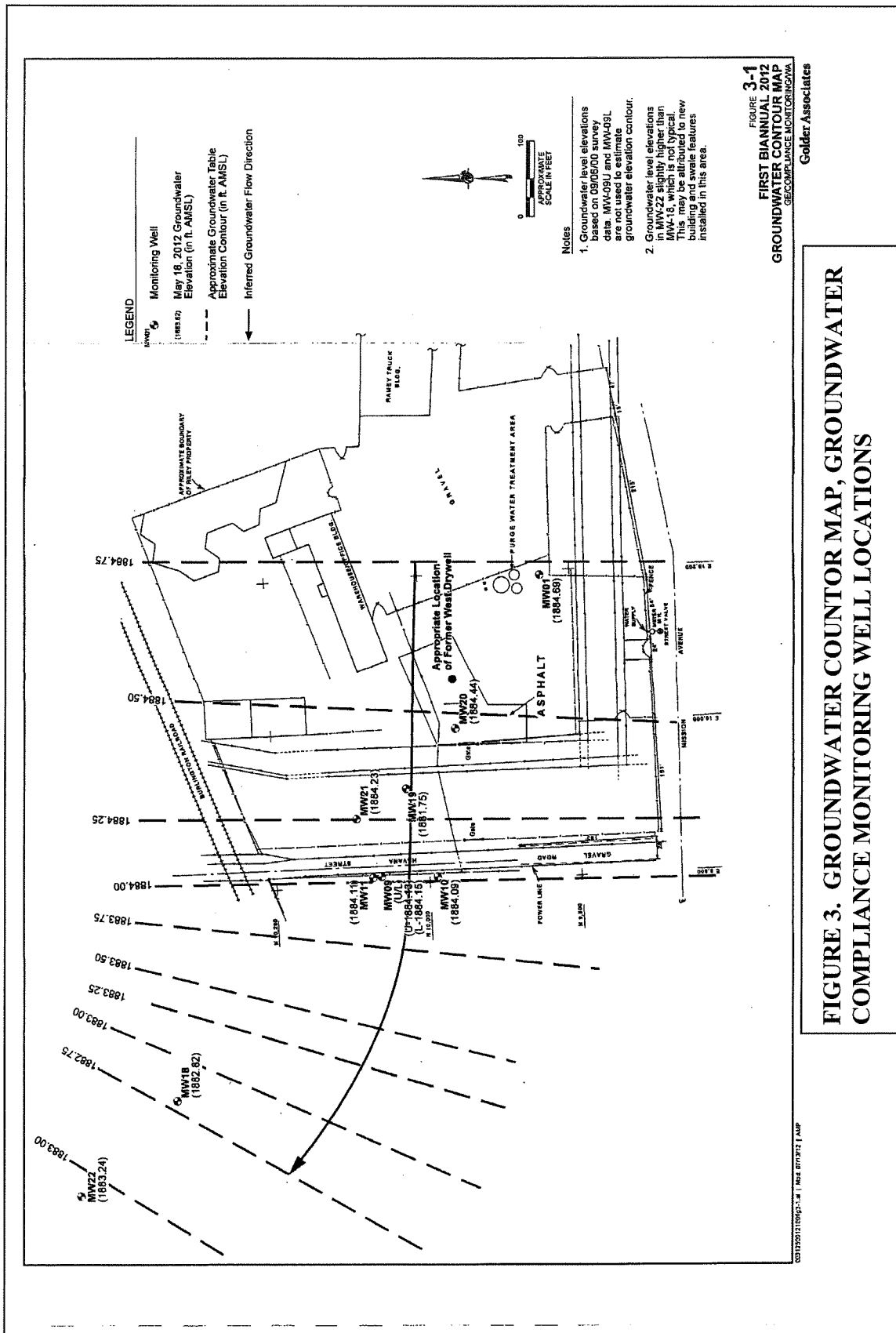
GE owned and operated a transformer service shop on its property from 1961 to 1980. From 1975 to 1980, GE also leased a warehouse for its operations from the adjacent property owned by Mr. Riley. Oils containing Polychlorinated Biphenyls (PCBs) were released to Site soils as a result of transformer service operations.

PCBs were first detected in Site soils in 1985. Three subsequent Remedial Investigations (RIs) performed by GE contractors found PCBs in surface soils and dry wells in the GE property as well as in the Avista and Riley properties. In the West Dry Well (Figure 3), the PCBs in soil caused groundwater contamination. It was also determined PCBs in groundwater were being transported to properties not owned by GE.

Groundwater across the Site flows primarily northwesterly as shown in Figure 3. Based on historical data, high groundwater elevations occur in the spring and the lows occur in the summer. The PCB plume in groundwater extends from the West Dry Well area (located in the vicinity of MW-20 in Figure 3) to the northwest. Lateral extent of the plume is limited due to the velocity of groundwater in this area, and the relatively narrow source area.

Interim actions were undertaken in 1989 to facilitate access to a portion of the Site for further characterization of soil and debris. GE demolished buildings and excavated most subsurface tanks and drainage structures. PCB-bearing soils and debris were used to construct a “test cell” to demonstrate the effectiveness of an innovative technology called In-Situ Vitrification (ISV), in destroying PCBs to levels required under federal law and regulation.

The RI and the Feasibility Study (FS) were completed in 1992. GE proposed that ISV be chosen as the remedial technology to clean up Site soils once its effectiveness was demonstrated. This ISV treatment effectiveness required the completion of a federal Toxic Substances Control Act (TSCA) demonstration test and acquiring a TSCA permit.



## 2.2 CLEANUP ACTION PLAN

### 2.2.1 Remedial Action Objectives

Ecology issued the Cleanup Action Plan (CAP) for the Site in 1993. The Remedial Action Objectives (RAOs) to mitigate the long-term risks to human health and the environment as identified in the CAP are as follows:

- Reduce the potential for migration of PCBs from soil to groundwater to protect groundwater quality.
- Prevent dermal contact or ingestion of soils to protect human health in an industrial exposure setting.
- Prevent ingestion of PCB-bearing groundwater.
- Prevent off-property migration of PCB-bearing groundwater.

### 2.2.2 Cleanup Levels and Points of Compliance

Ecology's 1993 CAP established PCBs and Total Petroleum Hydrocarbons (TPHs) as chemicals of concern for Site soils and PCBs as chemicals of concern in groundwater. The surface soil cleanup levels were based on exposure under industrial land use conditions. The groundwater cleanup level is based on current or potential source of drinking water use.

The cleanup levels identified in the CAP are the following:

Media	Chemical	Cleanup Level	Basis
Surface Soil (0-15 feet)	PCBs	10 mg/Kg	Method A, Industrial WAC 173-340-745(2)(a)(i)
Deep Soil (>15 feet)	PCBs	60 mg/Kg	Method B, protection of groundwater, WAC 173-340-740-(3)(ii)(A)
Soil	TPH	100 mg/Kg	Method A, Industrial WAC 173-340-745(2)(a)(i)
Ground Water	PCB	0.1 ug/L	Method A, WAC 173-340-720(2)(a)(i). This cleanup level is the total value for all PCBs. This is based on concentration derived using the Method B formula for drinking water and adjusted for the Practical Quantitation Limit (PQL).

---

The Points of Compliance are:

For soils where the cleanup level is based on human exposure via direct contact, the point of compliance is from the ground surface to fifteen feet below the ground surface. For soil cleanup levels based on protection of groundwater, the point of compliance is throughout the Site.

For groundwater, the point of compliance is throughout the Site and extends to the outer boundary of the plume.

### **2.2.3 Selected Cleanup Action**

The 1993 CAP identified the following cleanup actions:

- Treat soils via ISV. Should ISV be unavailable, perform stabilization of deep soil through grouting, and treat shallow soils via thermal destruction.
- Place use restrictions on soils indicating the Site is to be used only for industrial purposes.
- Implement institutional controls to restrict extraction and use of contaminated groundwater.
- Institute a groundwater monitoring program to demonstrate compliance with cleanup standards

A consent decree for implementing the CAP was signed in December 1993.

The ISV demonstration test, originally planned for 1991, was delayed until 1994 following failure of an Operational Acceptance Test of the ISV equipment at the vendor's Richland, Washington Test Site. The on-site 1994 demonstration of ISV was largely successful, but irregularities in performance sampling and analysis led to conditions on the permit issued by USEPA in 1995. Cost information obtained during the demonstration test led to a reconsideration of the selected remedy.

Ecology amended the CAP and Consent Decree in an Explanation of Significant Differences in 1996 to allow off-site disposal of soils bearing low concentrations of PCBs because of substantial and disproportionate costs.

---

## 2.3 SUMMARY OF CLEANUP ACTIONS

The following cleanup actions were undertaken at the Site:

- Deep West Dry Well soils in contact with groundwater were grouted in 1996 to decrease their mobility and reduce PCB concentrations in groundwater. A significant volume of these dry well soils were removed and stockpiled and vitrified on Site that same year.
- About 2,500 tons of soils bearing high concentrations of PCBs and West Dry Well structural materials were vitrified on Site in late 1996.
- 27,400 tons of low concentration soils were excavated and disposed off-site in 1997. GE excavated soils on Avista-owned property to the industrial cleanup level of 10 mg/Kg. Soils, in the Riley owned property, were removed to the residential cleanup level of 1 mg/Kg, a level which does not require land use controls. A significantly greater volume of PCB-bearing soils was encountered than predicted by RI data. Once soils had been removed to the proper cleanup level except for those on GE-owned property, GE ceased excavation and contained the volume of remaining soils by placing an asphalt cap on the northwest corner of the Site (see Figure 3). GE then petitioned Ecology for a change in cleanup level. That petition was based upon consideration of the 1996 revisions to the PCB toxicity published on the Integrated Risk Information System. Ecology denied this request. However, Ecology evaluated and subsequently agreed to the protectiveness of containment measures implemented by GE on this small volume of site soils. Ecology published a second Explanation of Significant Differences in late 1998 outlining this change, which became final after public notice and opportunity to comment on January 28, 1999.
- Long-term monitoring of groundwater for PCBs was initiated in 1994.
- Institutional controls implemented for this Site included:
  - Fencing the GE property.
  - Inspecting and maintaining the asphalt cap in the GE property.
  - Recording of Restrictive Covenants to prohibit activities that may interfere with the cleanup actions and/or to restrict land use and use of groundwater for the GE property, the Avista property, and the Lawton Converter property (see Appendix A).

All actions taken since publication of the 1993 CAP are documented in detail in the 1998 Final Cleanup Action Report. USEPA issued a “construction complete” determination thereafter.

---

## **2.4 LONG-TERM GROUNDWATER MONITORING**

Implementation of the long-term groundwater monitoring started in 1994 in accordance with the 1993 Ground Water Monitoring Plan. This plan was later modified in 1998 and 2003. The groundwater monitoring network is shown in Figure 3. MW01 is the up gradient well. MW01 and MW20 are located on GE's property. MW19 and MW21 are located to the west of the Site on property owned by Avista. MW09 U/L, MW10, and MW11 are located on the west side of Havana Street on property owned by Lawton Converter. MW18 and MW22 are located the furthest hydraulically down gradient and are located on the Spokane National Guard Readiness Center property.

In 2003, Ecology approved the discontinuation of the collection of groundwater samples for PCB analysis from wells MW09U/L. PCBs were never detected from these two wells that monitor deeper layers of the aquifer.

Quarterly groundwater sampling was conducted until the second quarter of 2007. Ecology approved GE's request to reduce the sampling frequency to semi-annually starting the second half of 2007. USEPA Method 8082 with a modified procedure to lower the detection limit has been used to analyze for the PCBs.

## **2.5 INSPECTION AND MAINTENANCE OF ASPHALT CAP AND FENCE**

Visual inspections for integrity and condition of the asphalt cap and the fence have been conducted at the Site during scheduled groundwater monitoring events. The fence surrounding the GE property has remained intact and the following cap repairs were conducted during this third periodic review period:

- In September 2007, cracks were observed in some portions of the cap. These cracks were patched as described in the November 29, 2007 "GE Spokane Cap Inspection and Repair" report.
- The asphalt cap and perimeter fencing were inspected and two cracks were repaired in the asphalt during the Second Biannual 2008 sampling event.
- Cracks in the asphalt cap were also repaired in June 2009.
- Two cracks were repaired during the First and Second Biannual 2009 sampling events.

Asphalt cap and fence inspection photos are included as Appendix B. These photos are from Appendix F of the First Biannual 2012 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 26, 2012 (Golder Associates).

---

### **3.0 PERIODIC REVIEW**

When evaluating whether human health and the environment are being protected, the factors Ecology shall consider include [WAC 173-340-420(4)]:

- The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site.
- New scientific information for individual hazardous substances or mixtures present at the site.
- New applicable state and federal laws for hazardous substances present at the site;
- Current and projected site and resource uses.
- The availability and practicability of more permanent remedies.
- The availability of improved analytical techniques to evaluate compliance with cleanup levels.

#### **3.1 FIRST PERIODIC REVIEW**

Ecology conducted the first periodic review in March 2003. This covered the period from the 2<sup>nd</sup> Quarter 1997 up to and including the 2<sup>nd</sup> Quarter 2002 ground water monitoring events. This report concluded that:

- The remedy was functioning as intended by the decision documents.
- The exposure assumptions, toxicity data, cleanup levels, and RAOs remained valid.
- No additional information was available which could call into question the protectiveness of the remedy.

Groundwater cleanup level was not achieved at the point of compliance during the first review period. The report recommended the continuation of groundwater monitoring.

This first review also established the following additional actions:

- Consideration of including congener analysis in the ground water monitoring program which may be appropriate in the future to achieve risk-based cleanup levels.
- Implementation of institutional controls, in the form of deed restrictions, on the City of Spokane property. PCB concentrations exceeding the cleanup level were observed in MW-18.

---

## 3.2 SECOND PERIODIC REVIEW

The second periodic review was completed in April 2008. This covered the groundwater monitoring period from the 3<sup>rd</sup> Quarter 2002 through the 2<sup>nd</sup> Quarter 2007. Groundwater monitoring data, asphalt cap inspection reports, and existing institutional controls were evaluated. This review provided the following conclusions:

- The cleanup actions implemented at the Site continued to be protective of human health and the environment.
- Groundwater cleanup levels had not been attained at the Site primarily because PCB concentrations in MW11 and MW19 still exceeded the cleanup level. However, institutional controls prohibited the use of and therefore prevented the exposure of PCBs in groundwater.
- Soils exceeding the cleanup level contained in the GE property complied with cleanup standards under WAC 173-340-740(6)(f) since the long-term integrity of the containment system is ensured and the requirements for containment technologies are met.
- Existing institutional controls were effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.
- Congener analysis, which was recommended in the first five-year review as a consideration, was not necessary at the time since the Method A PCB cleanup level for ground water has not changed.
- Groundwater PCB cleanup level was not exceeded in MW18 or MW22 during this review period. At the time, there was no need for institutional control in the form of deed restrictions for the City of Spokane property. A reassessment of this need was necessary if exceedance to the PCB cleanup level in groundwater is observed in future monitoring events.

The recommendations were:

- Continued groundwater monitoring, since the cleanup level of PCBs in groundwater has not been achieved at the point of compliance, at a modified frequency of semi-annually until modified by Ecology.
- Continued inspecting and repairing the asphalt cap, as necessary.

## 3.3 THIRD PERIODIC REVIEW

This third periodic review includes the evaluation of groundwater data, asphalt cap inspection reports, and existing institutional controls from the second half of 2007 until 2012.

### 3.3.1 Groundwater Monitoring Data Review

During this review period, groundwater samples were collected biannually for PCB analysis from the eight monitoring wells shown in Figure 3 with the exception of MW09U/L. Samples were analyzed for PCBs using USEPA Method 8082 with a modified extraction procedure to lower the method detection limit (MDL) to around 0.05 µg/L. PCBs detected under this method are reported as Aroclor equivalents. The total PCBs is the sum of the different Aroclors.

Table 1 shows the 2<sup>nd</sup> half of 2007 through 2012 total PCB concentrations in groundwater from the eight compliance monitoring wells shown in Figure 3.

Total PCB Concentrations, µg/L								
Date	MW-01	MW-20	MW-19	MW-21	MW-10	MW-11	MW-18	MW-22
Dec-07	0.05U	0.05U	0.05U	0.05U	0.05U	<b>0.21</b>	0.05U	0.05U
			<b>0.052</b>					
May-08	0.05U	0.05U	<b>0.074</b>	0.05U	0.05U	<b>0.11</b>	0.05U	0.05U
							0.05U	
Sep-08	0.05U	0.05U	0.05U	0.05U	0.05U	<b>0.13</b>	0.05U	0.05U
			<b>0.051</b>					
May-09	0.05U	0.05U	<b>0.074</b>	0.05U	0.05U	<b>0.11</b>	0.05U	0.05U
							0.05U	
Oct-09	0.05U	0.05U	0.05U	0.05U	0.05U	<b>0.13</b>	0.05U	0.05U
			0.05U					
May-10	0.05U	0.05U	0.05U	0.05U	0.05U	<b>0.062</b>	0.05U	0.05U
						<b>0.052</b>		
Oct-10	0.05U	0.05U	0.05U	0.05UJ	0.05UJ	<b>0.073</b>	0.05U	0.05U
			0.05U					
May-11	0.05U	0.05U	0.05U	0.05UJ	0.05UJ	0.084UJ	0.05UJ	0.05U
						<b>0.15</b>		
Oct-11	0.05UJ	0.05U	<b>0.051</b>	0.05UJ	0.05U	<b>0.064</b>	0.05UJ	0.05UJ
						0.05U		
May-12	0.047U	0.047U	0.047U	0.047UJ	0.047U	<b>0.21*</b>	0.047UJ	0.047U
								0.047U
Oct-12	0.047U	0.047U	0.047U	0.047U	0.047U	<b>0.065</b>	0.048U	0.047UJ
						<b>0.12</b>		
U - Not detected at the MDL								
UJ – Not detected due to QC deficiencies								
<b>Bold</b> concentrations – Detected concentrations								
<b>Highlighted cells</b> – Exceeds cleanup level of 0.1 µg/L								
*0.06 µg/L Aroclor 1254 and 0.15 µg/L Aroclor 1260								

TABLE 1. PCB CONCENTRATIONS IN COMPLIANCE MONITORING WELLS

During this review period, PCBs were detected in only two of the eight monitoring wells, MW11 and MW19. Figure 4 shows the PCB concentrations in MW11 and MW19 during this review period. 'No detects' in these figures (and other subsequent figures) were plotted as half of the detection limit (i.e. 0.025 for a detection limit of 0.05). The PCBs detected in MW-19 were all below the cleanup level. PCBs detected in MW-11 were above the cleanup level in eight out of eleven sampling events.

The locations of MW-11 and MW-19 are in a narrow plume of PCB contamination in groundwater that originated from the PCB source area (the West Dry well) and extending in the northwesterly direction in the general direction of the groundwater flow shown in Figure 3.

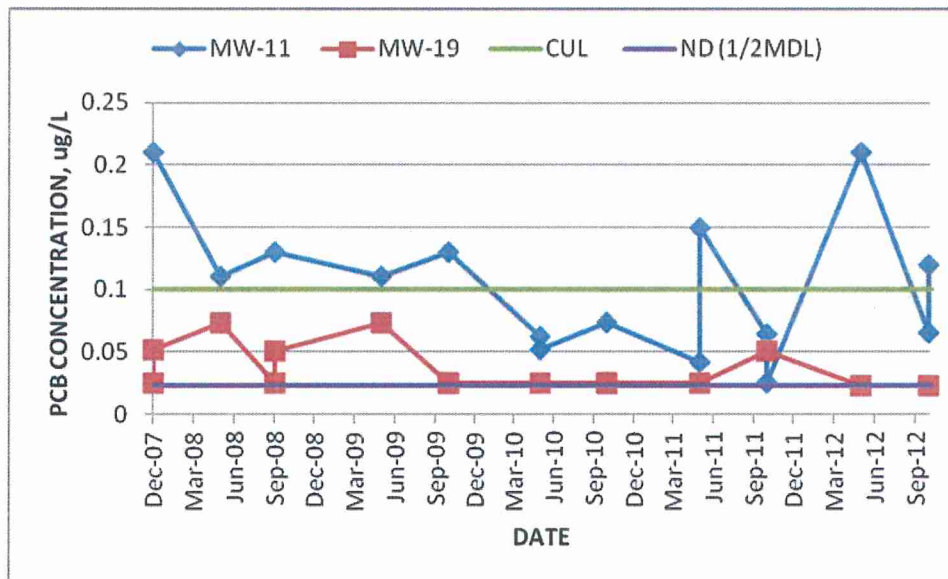


FIGURE 4. PCB CONCENTRATIONS IN MW11 AND MW19

The PCBs detected were in the form of Aroclor 1260 except in MW-11 where Aroclor 1254 was also detected in the May 2012 sample. Thus, the total PCB concentrations in all the other groundwater samples (the sum of all Aroclor values) are the same as Aroclor 1260 concentrations since no other Aroclor equivalents were detected.

### 3.3.1.1 Contaminant Trends

#### MW01

This is the upgradient well. PCBs in this well were all no detects during this review and during the two previous review periods.

## MW20

This well is in the vicinity of the West Dry Well, the PCB source area and the grouted zone. PCBs were all no detects during this review period December 2007 through 2012. Figure 5 shows the concentrations in this well from 2002 through 2012 which includes the second review period. PCB concentrations in this well have been below the cleanup level since 2005.

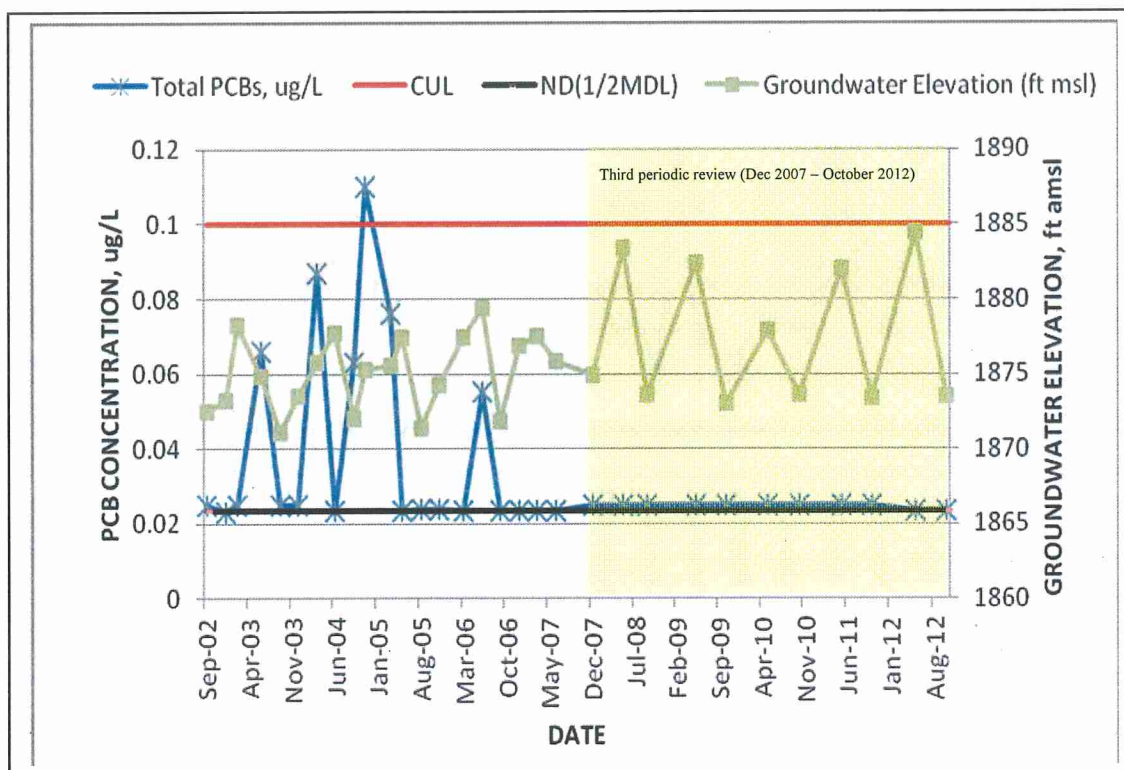


FIGURE 5. MW20 PCB CONCENTRATIONS FOR 2002 - 2012

## MW19

This well is downgradient of the West Dry Well. PCB concentrations detected in this well during this review period were below the cleanup level. The figure below (Figure 6) shows the concentrations for the last ten years and the decreasing concentration trend.

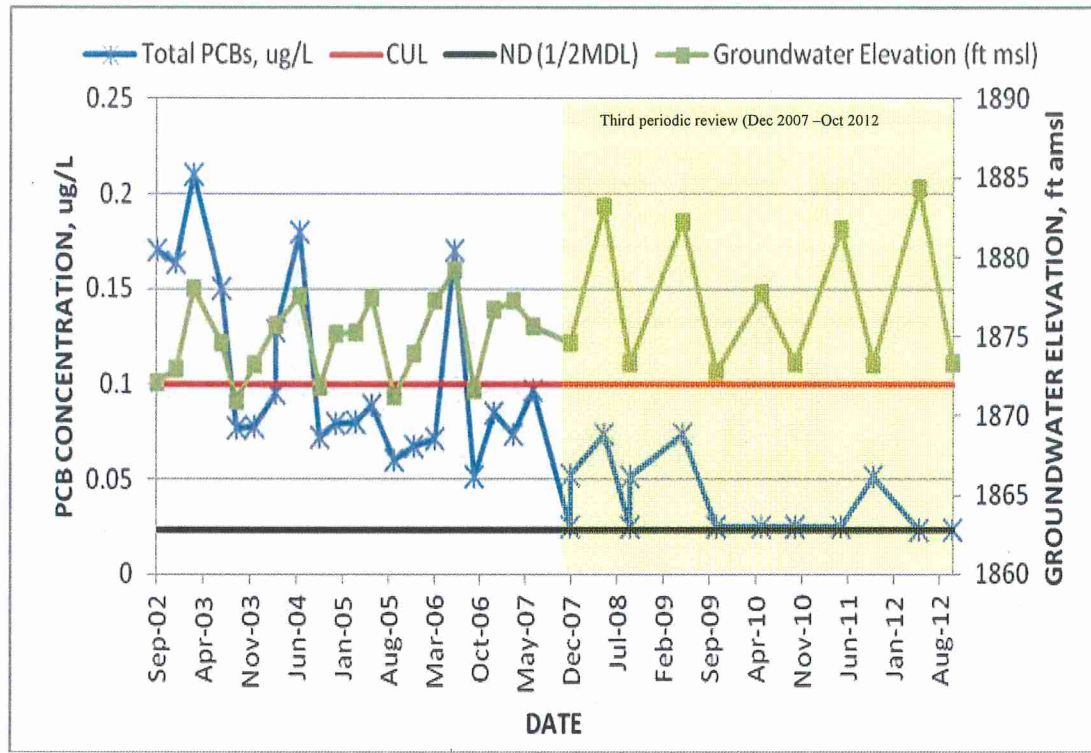


FIGURE 6. MW19 PCB CONCENTRATIONS 2002-2012

## MW21

This well appears to be near the edge of a long narrow plume. PCBs were not detected in this well during this review period. Sporadic detections below the cleanup level were detected during the second periodic review window. Concentrations in this well had been below the cleanup level for the past ten years.

## MW10

PCB concentrations in this well were all no detects for the third five-year review period. These were also all no detects during the second periodic review.

## MW11

This is the only well that consistently showed PCB concentrations above the cleanup level during the second periodic review. PCB concentrations exceeded the cleanup level in eight out of eleven sampling events for the third periodic review. These concentrations appear to be strongly correlated to groundwater elevations with the maximum PCB concentrations for each year occurring during or slightly following the highest ground water elevations. Observed maximum concentrations for each year have been decreasing even though ground water elevations have been increasing.

The decreasing PCB concentration trend during the second periodic review continued during the third review period with a spike in the concentration occurring in May 2012. This spike in concentration can be attributed to the highest groundwater elevation measured in this well in 10 years. Concentrations were generally below those measured during the second periodic review.

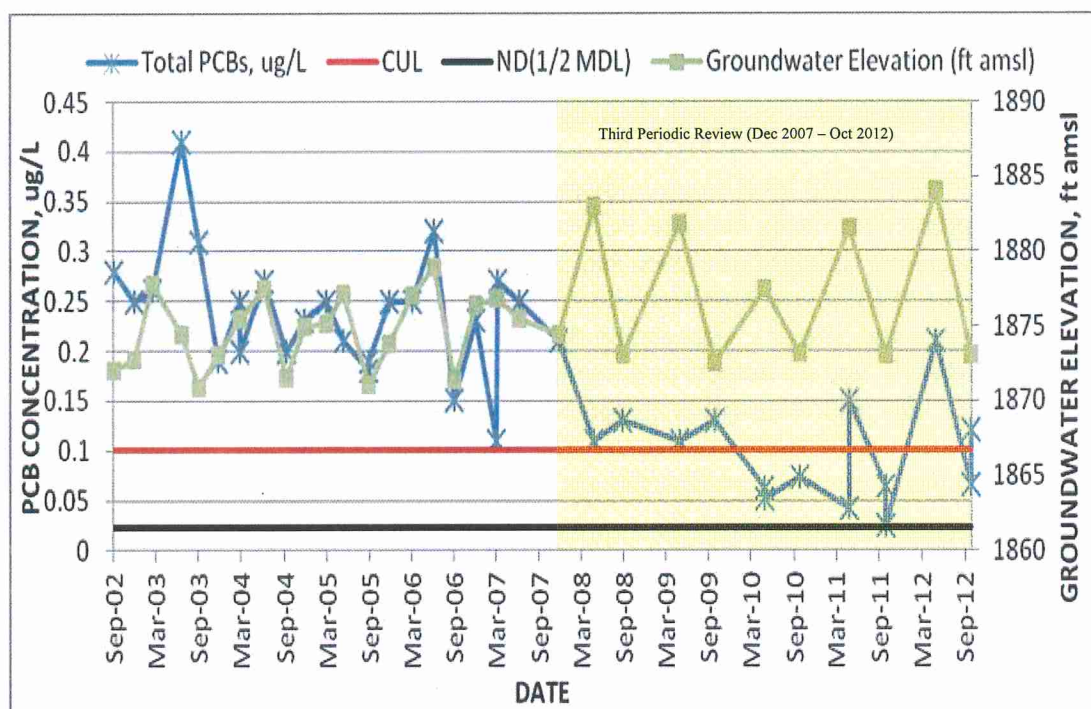


FIGURE 7. MW11 PCB CONCENTRATIONS 2002 - 2012

## MW18

PCBs were not detected in all samples. There were detections in this well during the second periodic review but all were below the cleanup level.

---

## MW22

This is the monitoring well closest to the Spokane River. PCB concentrations throughout this review period were no detects. Only one detect below the cleanup level was observed during the second review period which was below the cleanup level.

### **3.3.1.2 Groundwater Elevations**

Groundwater levels during this review period continued to be generally highest during the spring and lowest during the late summer. However, groundwater levels during this review period were higher than the levels measured during the previous review period (2002 to 2007) as can be observed from Figures 5, 6, and 7. These figures also show the observed relationship between the PCB concentrations and groundwater. This suggests that where there are still PCBs detections in groundwater, there is still residual PCBs in the smear zone that are transferred to the groundwater due to the rising water table.

### **3.3.2 Five Year Review Criteria**

#### **3.3.2.1 Effectiveness of completed cleanup actions**

- The PCB cleanup level in groundwater has yet to be achieved at the point of compliance primarily because PCB concentrations in MW11 exceeded the cleanup level in eight of eleven sampling events. However, groundwater quality in terms of PCB concentrations continued to improve as a result of the remedial actions at the Site as evidenced by the decreasing concentration trends in MW11 and MW19, and no detects or detections below cleanup levels in all the other wells. This improvement is attributed to the grouting of the dry well, the excavation of PCB-contaminated soils, and natural attenuation. Existing institutional controls prohibit the use and thus limit exposure to ground water.
- The asphalt cap over PCB contaminated soils in the GE property continues to perform as an impermeable cover system to minimize the migration of PCBs to groundwater and prevent direct contact with, or ingestion of PCBs in soil.
- Institutional controls continue to prohibit activities that will interfere with the implemented cleanup actions and to limit land use to industrial. The fence around the GE property is intact and in good condition and continues to prevent access to the Site.

While groundwater monitoring continues to be necessary, the cleanup actions implemented at the Site remained effective during this review period.

---

### **3.3.2.2 New scientific information for individual hazardous substances for mixtures present at the site.**

There is no new scientific information for the PCBs, specifically Aroclor 1260, during this review period.

### **3.3.2.3 New applicable state and federal laws for hazardous substances present at the Site**

There are no new applicable state and federal laws on PCBs during this review period.

The Method A cleanup level that was applied to this Site has not been changed. As such, Ecology has determined the Method A cleanup levels for PCBs identified in the CAP remain protective of human health and the environment.

### **3.3.2.4 Current and projected site use**

There have been no changes in current or projected future site use. The projected use for the Site remains industrial, and consistent with that of the adjacent properties.

### **3.3.2.5 Availability and practicability of higher preference technologies**

The excavation and disposal of PCB-contaminated soils contained inside the GE property is still technically an option. However, Ecology has made a determination this is not practical or necessary in terms of cost and protectiveness.

### **3.3.2.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels**

The analytical method currently employed for PCBs in ground water is USEPA Method 8082 with a modified extraction procedure to lower the detection limit. This method analyzes for aroclors, and the sum of all the aroclors represents the total PCBs. Since the cleanup level for groundwater is in terms of total PCBs, this method is still adequate to meet the objectives of groundwater compliance monitoring at this time.

The USEPA Method 1668 is an analytic technique that quantifies over 200 individual congeners. This method can support the evaluation of toxicity equivalent concentrations for risk assessment purposes. While this method is available, it is expensive, and the data provided is not necessary to meet the objectives of ground water compliance with cleanup level assessment at this Site.

---

## 4.0 CONCLUSIONS

- The cleanup actions implemented at the Site continue to be protective of human health and the environment. The remedy has resulted in decreasing concentrations of PCBs in impacted groundwater.
- Groundwater cleanup levels have not been attained at the Site primarily because PCB concentrations in MW11 still exceeded the cleanup level in eight out of eleven sampling events. These concentrations continue to decrease and still show seasonal fluctuations due to change in groundwater levels. However, institutional controls prohibit the use of and therefore prevent the exposure of PCBs in groundwater. Groundwater PCB concentrations in the other seven monitoring wells were all below the cleanup level.
- Soils exceeding the cleanup level contained in the GE property under an asphalt cap comply with cleanup standards under WAC 173-340-740(6)(f) since the long-term integrity of the containment system is ensured and the requirements for containment technologies are met.
- Existing institutional controls are effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

---

## 5.0 RECOMMENDATIONS

- Semi-annual groundwater monitoring and reporting to Ecology is to continue since the groundwater cleanup level of PCBs in MW11 has yet to be attained. Once the concentration of PCBs in MW11 groundwater has stayed below cleanup level for four consecutive sampling events, an assessment should be made if there are sufficient data to make a determination that cleanup levels have been attained at the Site or if additional sampling, with increased frequency, is necessary.
- GE will continue to inspect the cap and conduct repairs as necessary. Documentation of cap and fence integrity inspections and any repairs will be provided in ground water monitoring reports.

The fourth five-year review will be for the groundwater monitoring period starting in 2013 until 2017.

---

## 6.0 REFERENCES

Bechtel, Final Cleanup Action Report, GE-Spokane Remedial Design/Remedial Action Project, August 1998.

Golder Associates, Fourth Quarter and Annual 2007 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, January 21, 2008.

Golder Associates, First Biannual 2008 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 22, 2008.

Golder Associates, Second Biannual 2008 Groundwater Compliance Monitoring and Data Report for the General Electric Spokane Washington Site, November 2008.

Golder Associates, First Biannual 2009 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 2009.

Golder Associates, Second Biannual 2009 Groundwater Compliance Monitoring and Data Report for the General Electric Spokane Washington Site, November 2009.

Golder Associates, First Biannual 2010 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 22, 2010.

Golder Associates, Second Biannual 2010 Groundwater Compliance Monitoring and Data Report for the General Electric Spokane Washington Site, January 2011.

Golder Associates, First Biannual 2011 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 25, 2011.

Golder Associates, Second Biannual 2011 Groundwater Compliance Monitoring and Data Report for the General Electric Spokane Washington Site, January 27, 2012.

Golder Associates, First Biannual 2012 Groundwater Compliance Monitoring Report for General Electric Spokane, Washington Site, July 26, 2012.

Golder Associates, Second Biannual 2012 Groundwater Compliance Monitoring and Data Report for the General Electric Spokane Washington Site, January 29, 2013.

Golder Associates, GE Spokane Cap Inspection and Repair, November 29, 2007.

Ecology, 1993, Final Cleanup Action, Former General Electric Spokane Shop, Exhibit B to Consent Decree 93206059-3.

Ecology, 1996, Amendment to Cleanup Action Plan and Explanation of Significant Differences, Exhibit A to First Amendment to Consent Decree 93206059-3.

---

Ecology 1999, Amendment to Cleanup Action Plan and Explanation of Significant Differences No.2, Consent Decree 93206059-3.

Ecology, Periodic Review, General Electric/Spokane Site, 1997-2002, March 20, 2003.

Ecology, Second Periodic Review, General Electric Spokane Site, Spokane, WA, April 2008.

**[BLANK PAGE]**

# **APPENDIX A**

## **RESTRICTIVE COVENANTS**

95121 122

ORIGINAL FILED OR RECORDED

DEC 18 1995

COUNTY RECORDER  
SPOKANE COUNTY, WN.

ORIGINAL  
COPY

**DECLARATION OF RESTRICTIVE COVENANTS RUNNING  
WITH THE LAND**

KNOW ALL MEN BY THESE PRESENTS that General Electric Company, a corporation duly organized and existing under the laws of the State of New York and qualified to do business in the State of Washington, (hereinafter referred to as "Owner"), being the Owner in fee simple of that certain real property situate in the City of Spokane, County of Spokane, and State of Washington bounded and described as follows:

Part of Blocks 70 and 71, Parkwater, according to plat recorded in Volume "P" of Plats, Page 48, in the City of Spokane, Spokane County, Washington; ALSO that part of vacated Commerce Avenue, and ALSO that part of vacated alley in said Block 70 described as follows:

Beginning at a point on the Southeasterly line of Lot 7, in Block 70 of said Addition; 150 feet East of the East line of Havana Street; thence South on a line parallel and 150 feet East of said East line of Havana Street to a point 155 North of the South line of Section 11, Township 25 North, Range 43 E.W.M., in Spokane County, Washington; thence East along a line 155 feet North of and parallel with said South line of Section 11, to a point of intersection with the Northeasterly line of Lot 4 in said Block 71; thence Northwesterly along the Northeasterly line of said Lot 4 and the Northeasterly line of Lot 15 in said Block 70 and said lines of Lot 15 in said Block 70 and said lines extended to the most Easterly corner of Lot 4 in said Block 70; thence Southwesterly along the Northwesterly line of the vacated alley in said Block 70, to the point of beginning.

(hereinafter referred to as the "Premises")

hereby declares and establishes the following restrictive covenants on the Premises. The property that is the subject of this Declaration of Restrictive Covenants has been the subject of remedial action under Chapter 70.105D RCW. This Declaration of Restrictive Covenants is required by the Washington State Department of Ecology (hereinafter referred to as "Ecology") under Ecology's rule WAC 173-340-440 (1991 ed.) because the Cleanup Action on the Site resulted in residual concentrations of PCBs exceeding cleanup levels for soil established under WAC 173-340-740 and exceeding cleanup levels for groundwater established under WAC 173-340-720.

Industrial soil cleanup standards were used in the Cleanup Action (WAC 173-340-745). PCBs in groundwater exceed cleanup standards established for drinking water protection under WAC 173-340-720 in an area described on the attached map. These covenants are to run with the land and shall be binding upon the Owner and all persons who may later become the Owner or Owners of the Premises or any part thereof and all parties claiming under them in perpetuity, provided, however, that such covenants may be removed by an instrument in writing, recorded in the evidence of land records where the deed of the Premises is required to be recorded, and signed by the Owner (or the person or persons who are at the time of the instrument the Owner or Owners of the Premises) and also signed on behalf of the Ecology or such other agency of the State of Washington which at the time fulfills the functions of the Department of Ecology.

The Owner hereby declares and establishes these restrictive covenants in compliance with that certain Consent Decree #93206059, lodged on December 29, 1993 issued by Ecology with the consent of the Owner (hereinafter referred to as the Consent Decree). The restrictive covenants declared and established herein shall be interpreted and construed so as to accomplish the goals of the Consent Decree.

The restrictive covenants hereby declared and established are as follows:

1. (a) The map of the Premises attached to this instrument and marked Exhibit A shows the areas considered at the time of the execution of this Instrument to be impacted by polychlorinated biphenyls (hereinafter referred to as PCBs) in groundwater;

- 
- (b) The map of the Premises attached to this instrument and marked Exhibit B shows the areas considered to have shallow and deep soils containing PCBs above the 1 mg/kg cleanup level for residential use.

Such maps shall be part of this instrument.

- 
2. No person shall install and/or use or allow the installation and/or use of any water well for the purpose of providing drinking water for private or public use if such well could extract PCB-containing groundwater or affect the movement of PCB-containing groundwater located beneath the Premises and/or adjacent properties.

3. No person shall engage in any activities on the Premises that may interfere with the cleanup activities required to be performed by the Owner pursuant to the Consent Decree. Such activities shall include, without limitation, the following:

(a) maintenance of monitoring wells, installation of new monitoring wells (if necessary), monitoring well purging and groundwater sampling for compliance monitoring;

(b) the performance of the soil cleanup action, operation and maintenance, monitoring, or other measures necessary to assure the integrity of the cleanup action and continued protection of human health and the environment.

4. No person shall engage in any activities on the Premises that may result in the release to groundwater of PCBs which may be contained or immobilized as part of the cleanup action. Specifically, without limiting the generality of the foregoing, no person shall drill in the area shown on the map of the Premises attached hereto as designated as the West Dry Well area.

5. No person shall engage in any activities on the Premises that may result in the release to the environment of residual PCBs in soils without prior notice to and approval of Ecology of any proposal to handle, store or dispose of such soils which may be regulated as dangerous wastes under Chapter 70.105 of the Revised Code of Washington or any other provision of the Law of Washington State in force at the time.

6. Until the cleanup action is complete, the Owner or any later Owner of the Premises shall maintain fences and locked gates around the portions of the property containing affected soils and shall perform regular inspections to assure that the restrictions on access to these areas are effective.

7. The Owner of the Premises must give written notice to Ecology, or to a successor agency, of the Owner's intent to convey any interest in the Premises. No conveyance of title, easement, lease or other interest in the Premises shall be consummated by the Owner without adequate and complete provision for the continued operation, maintenance and monitoring of the Cleanup Action.

8. In the event that the Owner, any person or persons who may later own the Premises or any interest therein or any person claiming by, through or under them proposes to use the Premises in a manner which is inconsistent in any way with these restrictive covenants, such person may give written notice to Ecology of its proposal and may use the Premises as proposed if such proposal is approved in writing by Ecology.

9. Ecology and its designated representatives shall have the right to enter the Premises at reasonable times for the purposes of evaluating compliance with the cleanup action plan, including the right to take samples, inspect any remedial actions taken on the property, inspect records, and to observe compliance with these restrictive covenant provisions.

IN WITNESS WHEREOF, Owner has caused this instrument to be signed and sealed on its behalf by its officer thereunto duly authorized this 11 day of December, 1995.

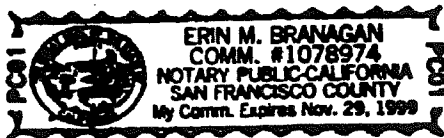
GENERAL ELECTRIC COMPANY

By Deborah A. Hankins

STATE OF CALIFORNIA  
COUNTY OF SAN FRANCISCO

On this 11 day of December, 1995, before me,  
ERIN M. BRANAGAN personally appeared DEBORAH HANKINS  
to me known to be of the corporation that executed the within and foregoing instrument,  
and acknowledged the said instrument to be the free and voluntary act and deed of said  
corporation, for the uses and purposes therein mentioned, and acknowledged to me that  
she executed the same in her authorized capacity, and that by her signature on the  
instrument the person or the entity upon behalf of which the person acted, executed the  
instrument.

In witness whereof, I have hereunto set my hand and affixed my official seal the  
day and year first above written.

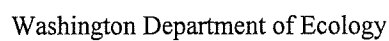


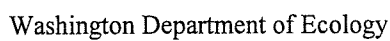
Erin M. Branagan  
Notary Public in and for the State of California

Residing at San Francisco

My commission expires 11/29/99


**Exhibit A**








- 1) All concentrations shown are total PCBs.
- 2) A modified extraction method was used to achieve a detection limit of 0.05 ug/L for PCB analyses performed on samples collected on or after 1/6/84.
- 3) P = Concentration detected by primary and secondary columns differed by more than 25 percent. The lower concentration value was reported by the laboratory as per CLP guidelines.

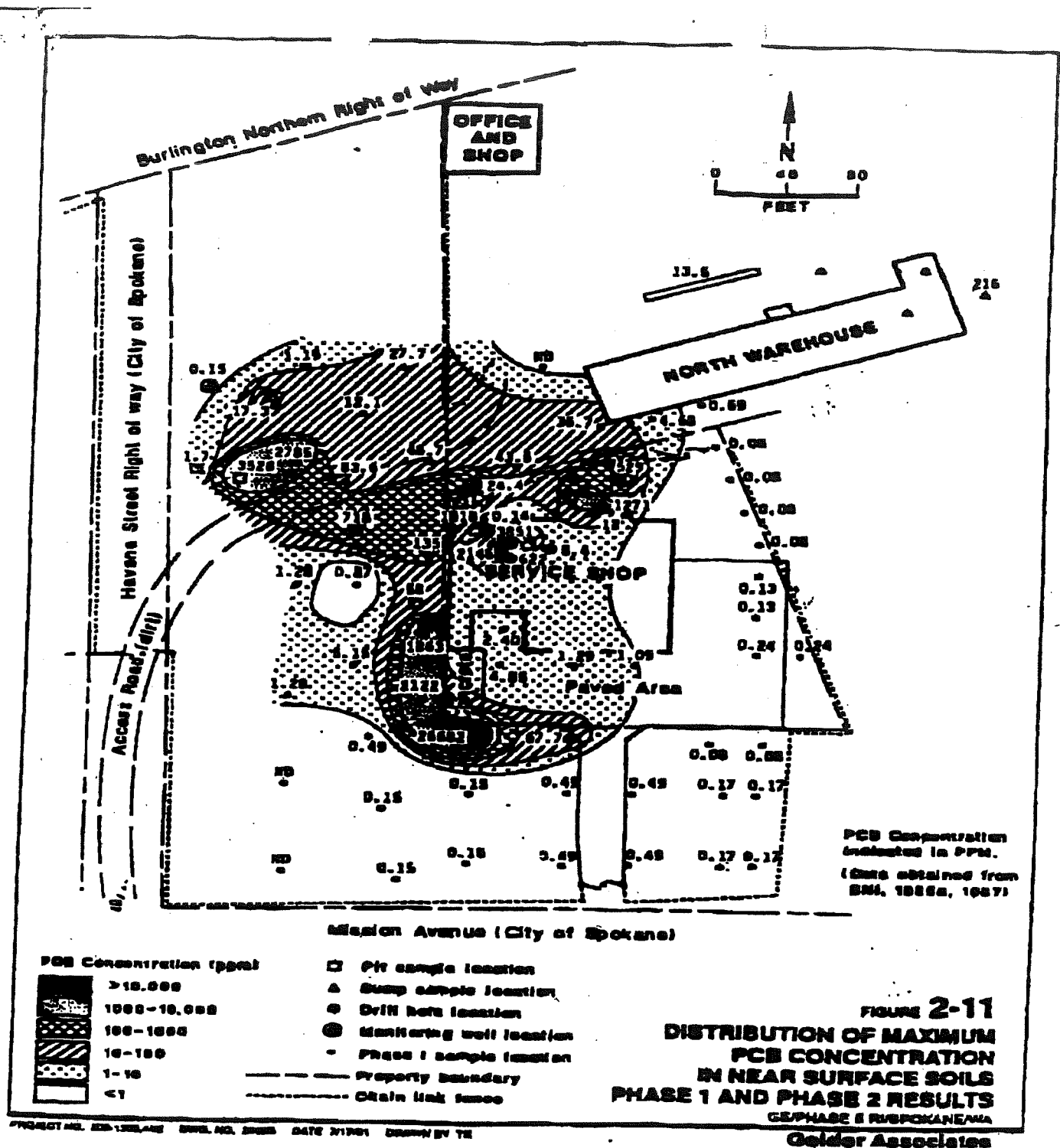
	Job Number	18089	<div> <div> Drawing No. </div> <div> FIGURE 4-2 </div> </div>	Rev.	A
	<p align="center"> <b>PCB DETECTED IN MW05</b>  <b>GENERAL ELECTRIC/SPOKANE</b> </p>				



- 1) All concentrations shown are total PCBs.
- 2) ND = Not detected.
- 3) A modified extraction method was used to achieve a detection limit of 0.05 ug/L for PCB analyses performed on samples collected on or after 1/8/94.
- 4) J = Estimated concentration.

	Job Number	Drawing No.	Rev.
	18039	FIGURE 4-3	A

**Exhibit B**



RETURN TO:  
Perkins Coie  
N. 221 Wall Street, #600  
Spokane, WA 99201



4034989  
Page: 1 of 12  
09/12/1996 04:30P  
Spokane Co. WA XHIBIT B

**DECLARATION OF RESTRICTIVE COVENANTS  
RUNNING WITH THE LAND**

**KNOW ALL MEN BY THESE PRESENTS** that The Washington Water Power Company (hereinafter referred to as "Owner"), being the owner in fee simple of that certain real property situated in the city of Spokane, County of Spokane, and state of Washington bounded and described as shown on Exhibit C attached hereto and made a part hereof (hereinafter referred to as the Premises) hereby declares and establishes the following restrictive covenants on the Premises.

The property that is the subject of this Declaration of Restrictive Covenants has been the subject of remedial action under Chapter 70.105D RCW. This Declaration of Restrictive Covenants is required by the Washington State Department of Ecology (hereinafter referred to as "Ecology") under Ecology's rule WAC 173-340-440 (1991 ed.) because the Cleanup Action on the Site, as defined by the map labeled Exhibit D, resulted in residual concentrations of PCBs exceeding cleanup levels for soil established under WAC 173-340-740 and exceeding cleanup levels for ground water established under WAC 173-340-720. Industrial soil cleanup standards were used in the Cleanup Action (WAC 173-340-745). PCBs in ground water exceed cleanup standards established for drinking water protection under WAC 173-340-720 in an area described on the attached map, labeled Exhibit E.

These covenants are to run with the land and shall be binding upon the Owner and all persons who may later become the owner or owners of the Premises or any part thereof and all parties claiming under them in perpetuity, provided, however, that such covenants may be removed by an instrument in writing, recorded in the evidence of land records in Spokane County, Washington, and signed by the Owner (or the person or persons who are at the time of the instrument the owner or owners of the Premises) and also signed on behalf of Ecology or such other agency of the State of Washington which at the time fulfills the functions of Ecology.

The Owner hereby declares and establishes these restrictive covenants in compliance with that certain Consent Decree #93206059-3 lodged on December 29, 1993, and any amendments thereto issued by Ecology with the consent of General Electric Company, the owner of property adjacent to the Premises (hereinafter referred to as the Consent Decree). The restrictive covenants declared and established herein shall be interpreted and construed so as to accomplish the goals of the Consent Decree.

The restrictive covenants hereby declared and established are as follows:

1. No person shall engage in any activities on the Premises that may interfere with the cleanup activities required to be performed by General Electric Company pursuant to the Consent Decree. Such clean up activities shall include, without limitation, the following: staging for, preparation of, and implementation of cleanup actions, and operation, maintenance, monitoring or other measures

STATE OF WASHINGTON }  
COUNTY OF SPOKANE } SS  
I, William E. Donahue, Spokane County Auditor, do  
hereby certify that the foregoing instrument is a true  
and correct copy of the document received and re-  
corded in my office.

In witness whereof, I hereunto set my hand this  
2nd day of Oct 1996  
WILLIAM E. DONAHUE, Spokane County Auditor

*[Signature]* Deputy



4034989  
Page: 2 of 12  
09/12/1996 04:30P  
Spokane Co., WA

necessary to assure the integrity of the clean up action and continued protection to human health and the environment.

2. No person shall engage in any activities on the Premises that may result in the release of hazardous substances which were contained as part of the clean up action.
3. Owner shall not convey the Premises or any interest therein to any other person or persons without first giving notice of its intent to do so to Ecology.
4. In the event that the Owner, any person or persons who may later own the Premises or any interest therein or any person claiming by, through or under them proposes to use the Premises in a manner which is inconsistent in any way with these restrictive covenants, such person shall give written notice to Ecology of its proposal. No such person shall use the Premises in any manner inconsistent with these restrictive covenants without the prior written consent of Ecology. It is expected that Ecology will not approve future uses leading to residential exposures, but will consider uses consistent with the current industrial zoning of the Premises.
5. Ecology and its designated representatives shall have the right to enter the Premises at reasonable times for the purposes of evaluating compliance with the cleanup action plan, including the right to take samples, inspect any remedial actions taken on the property, and inspect records.
6. No person shall use the ground water under the Premises for any purpose and no person shall use the Premises for any residential purpose.

IN WITNESS WHEREOF, Owner has executed this instrument this 12 day of July, 1996.

The Washington Water Power Company

By TR D. Anderson

Name: \_\_\_\_\_

Title: \_\_\_\_\_

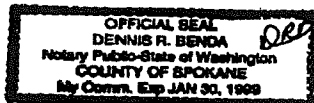


4034989  
Page: 3 of 12  
09/12/1996 04:30P  
Spokane Co., WA

STATE OF WASHINGTON  
COUNTY OF Spokane

On this 12<sup>th</sup> day of July, 1996, before me personally appeared Bob D. Anderson, <sup>Licensing & Environmental Assessments Manager</sup> to me known to be the Vice President of the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

In witness whereof, I have hereunto set my hand and affixed my official seal the day and year first above written.



Dennis R. Bender  
Notary Public in and for the State of Washington

Residing at Spokane

My commission expires 1/30/99



4034989  
Page: 4 of 12  
09/12/1996 04:30P  
Spokane Co., WA

**EXHIBIT C**



**EXHIBIT C**

Block 52 Lots 19, 20, and 21, and a portion of Lot 18;

Block 70 Lots 8, 9, 10, 11 and portions of Lots 6, 7, and 12;

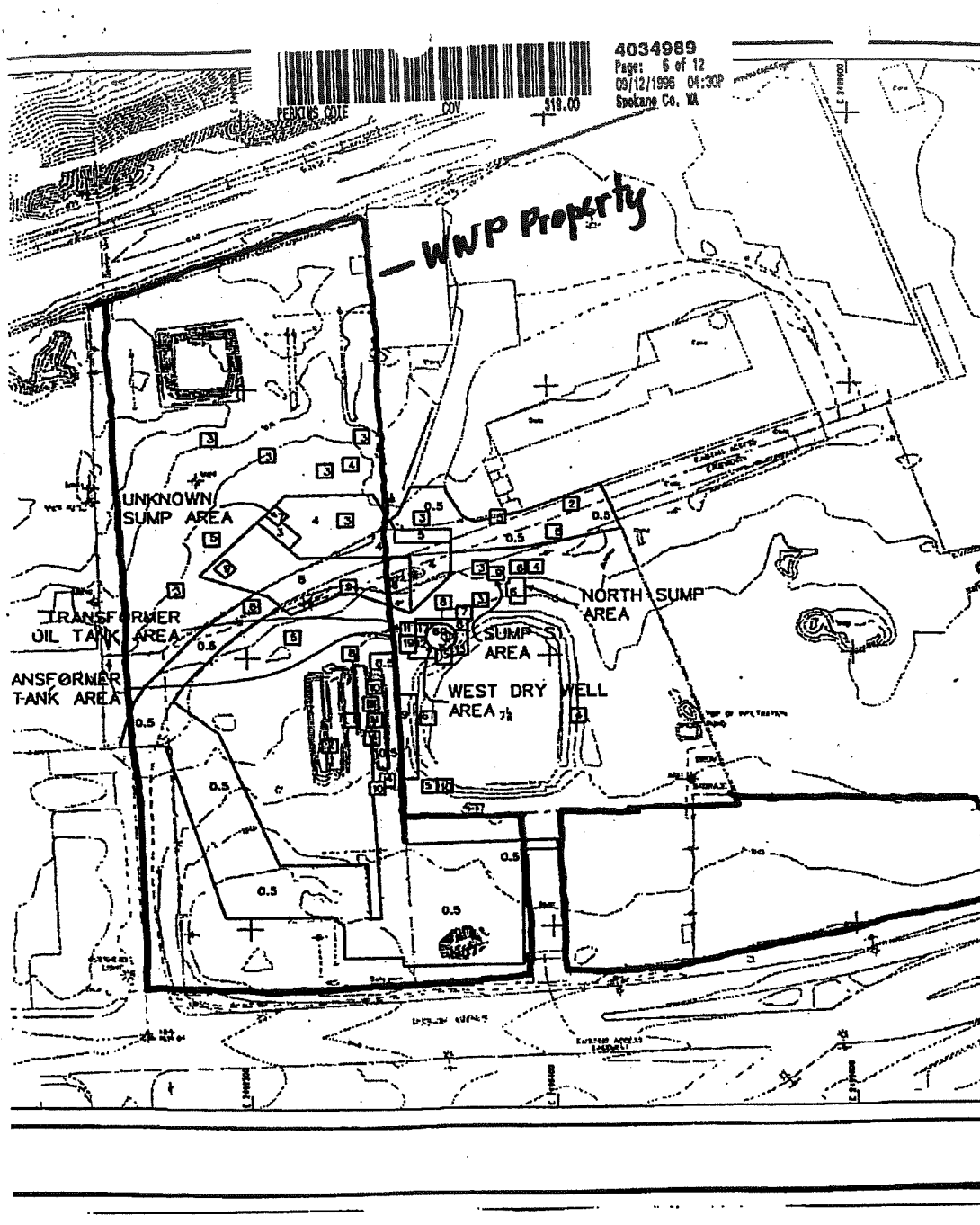
Block 71 Lots 9, 10, 11, 12, 13, 14 and 15, and portions of Lots 1, 2, 3, 4, 5, 6, 7, 8, and 16;

Block 72 Portions of Lots 13-17;

all in Parkwater Addition to the City of Spokane, Spokane County, Washington.

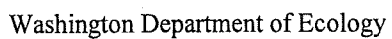
[7KA962560.024]

9/12/96





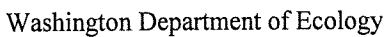
**EXHIBIT D**

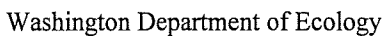


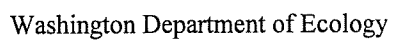


4034989  
Page: 9 of 12  
09/12/1996 04:30P  
Spokane Co, WA

**EXHIBIT E**







After recording return :  
Dan Ballbach  
Perkins Coie  
1201 Third Ave. 40th Fl.  
Seattle, WA 98101



4003621  
Page: 1 of 3  
06/12/1996 10:06A  
Spokane Co, WA

## DECLARATION OF RESTRICTIVE COVENANTS RUNNING WITH THE LAND

*Partnership of*  
KNOW ALL MEN BY THESE PRESENTS that Lawton Converter, a ~~corporation~~ *partnership* duly organized and existing under the laws of the State of ~~Washington~~ *Washington* and qualified to do business in the State of Washington, (hereinafter referred to as "Owner"), being the Owner in fee simple of that certain real property situated in the City of Spokane, County of Spokane, and State of Washington bounded, and described in Exhibit A (hereinafter referred to as the "Premises"), hereby declares and establishes the following restrictive covenants on the Premises.

The property that is the subject of this Declaration of Restrictive Covenants has been the subject of remedial action under Chapter 70.105D RCW. This Declaration of Restrictive Covenants is required by the Washington State Department of Ecology (hereinafter referred to as "Ecology") under Ecology's rule WAC 173-340-440 (1991 ed.).

These covenants are to run with the land and shall be binding upon the Owner and all persons who may later become the Owner or Owners of the Premises or any part thereof and all parties claiming under them in perpetuity, provided, however, that such covenants may be removed by an instrument in writing, recorded in the evidence of land records where the deed of the Premises is required to be recorded, and signed by the Owner (or the person or persons who are at the time of the instrument the Owner or Owners of the Premises) and also signed on behalf of the Ecology or such other agency of the State of Washington which at the time fulfills the functions of the Department of Ecology.

The Owner hereby declares and establishes these restrictive covenants in compliance with that certain Consent Decree #93206059-3, lodged on December 29, 1993 issued by Ecology with the consent of the General Electric Company ("GE"), the owner of property in the vicinity of the Premises (hereinafter referred to as the Consent Decree). The restrictive covenants declared and established herein shall be interpreted and construed so as to accomplish the goals of the Consent Decree.

The restrictive covenants hereby declared and established are as follows:

1. No person shall engage in any activities on the Premises that may interfere with the cleanup activities required to be performed by GE pursuant



4003621  
Page: 2 of 3  
06/12/1996 10:06A  
Spokane Co, WA

to the Consent Decree. Such activities shall include, without limitation, the following: staging for, preparation of, and implementation of cleanup actions, and operation, maintenance, monitoring or other measures necessary to assure the integrity of the cleanup action and continued protection to human health and the environment.

2. No person shall engage in any activities on the Premises that may result in the release of hazardous substances which were contained as part of the cleanup action.

3. The Owner of the Premises must give written notice to Ecology, or to a successor agency, of the Owner's intent to convey any interest in the Premises.

4. In the event that the Owner, any person or persons who may later own the Premises or any interest therein or any person claiming by, through or under them proposes to use the Premises in a manner which is inconsistent in any way with these restrictive covenants, such person may give written notice to Ecology of its proposal and may use the Premises as proposed if such proposal is approved in writing by Ecology.

5. Ecology and its designated representatives shall have the right to enter the Premises at reasonable times for the purposes of evaluating compliance with the cleanup action plan, including the right to take samples, inspect any remedial actions taken on the property, inspect records, and to observe compliance with these restrictive covenant provisions.

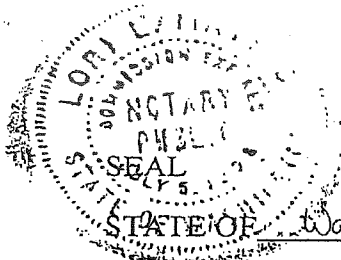
IN WITNESS WHEREOF, Owner has caused this instrument to be signed and sealed on its behalf by its officer thereunto duly authorized this 29<sup>th</sup> day of MAY, 1996.

LAWTON CONVERTER

By Gary Lawton

Name GARY LAWTON

Title Owner



4003621  
Page: 3 of 3  
06/12/1996 10:06A  
Spokane Co, WA

STATE OF Washington )  
 ) ss.  
COUNTY OF Spokane )

On this 29<sup>th</sup> day of May, 1996, before me personally appeared Gary Lawton, to me known to be the Partner of the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

In witness whereof, I have hereunto set my hand and affixed my official seal the day and year first above written.

Lori L. Mathis  
NOTARY PUBLIC in and for the State of  
Washington, residing at Spokane

Lori L. Mathis  
(Print Name)

My commission expires: July 5, 1998

## **APPENDIX B**

### **ASPHALT CAP INSPECTION DOCUMENTATION**

**(Source: Golder Associates, Second Biannual 2012 Groundwater Compliance Monitoring and Annual Data Report for General Electric Spokane, Washington Site, January 29, 2013, Appendix F)**

January 2013

1

003-1250-012

**ASPHALT CAP INSPECTION PHOTOS, SECOND BIENNIAL 2012 GROUNDWATER COMPLIANCE MONITORING, GE SPOKANE, WASHINGTON**

**PHOTO 1**

West end of cap looking southwest (October 2012)



**PHOTO 2**

Central portion of cap looking southeast (October 2012)



January 2013

2

003-1250-012

**ASPHALT CAP INSPECTION PHOTOS, SECOND BIENNIAL 2012 GROUNDWATER COMPLIANCE MONITORING, GE SPOKANE, WASHINGTON**

**PHOTO 3**

Central portion of cap  
looking northeast  
(October 2012)



**PHOTO 4**

West end of cap looking  
north at MW20  
(October 2012)



January 2013

3

003-1250-012

**ASPHALT CAP INSPECTION PHOTOS, SECOND BIENNIAL 2012 GROUNDWATER COMPLIANCE MONITORING, GE SPOKANE, WASHINGTON**

**PHOTO 5**

East end looking west  
(October 2012)

